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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/932,286	08/17/2001	Steven B. McGowan	884.516US1	4742
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EXAMINER				
HASHEM, LISA				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/932,286

Applicant(s)

MCGOWAN, STEVEN B.

Examiner

LISA HASHEM

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34-36, 41 and 45-48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34-36, 41 and 45-48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

FINAL DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 4-8-08 have been fully considered but they are not persuasive.
2. This office action has been restructured for clarity. Examiner did not change the grounds of rejection; but has changed the argument of the rejection below for clarity. The references U.S. Pat. No. 6,493,546 by Patsiokas for claims 34-36, 47, and 48 and Patsiokas in view of U.S. Pat. No. 6,181,921 by Konisi for claims 41, 45, and 46 teach the limitations of the claims, and the Examiner shows in the rejections below that the references are related to the claimed limitations.
3. Applicant argues that Patsiokas fails to disclose ‘...an out-of-band transmitter to transmit a channel selection signal comprising the available non-interfering carrier frequency...’ in claims 34 and 41. Examiner disagrees.

Patsiokas discloses an interface device or sound generation device (Fig. 1, 16; Fig. 3, 16) comprising a microcontroller (Fig. 3, 60; Fig. 7, 60) that transmits or sends an open RF channel with a small signal strength selected by a scanning receiver to a display (Fig. 3, 36) for viewing by a user of the interface device (col. 4, lines 61-67; col. 6, lines 7-13) which reads on the claimed limitation ‘...an out-of-band transmitter (i.e. the microcontroller of Patsiokas) to transmit a channel selection signal comprising the available non-interfering carrier frequency...’. Thus, the prior art discloses the claimed limitations.

4. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

5. Applicant's arguments do not comply with 37 CFR 1.111(c) because they do not clearly point out the patentable novelty which he or she thinks the claims present in view of the state of the art disclosed by the references cited or the objections made. Further, they do not show how the amendments avoid such references or objections.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 34-36, 47, and 48 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pat. No. 6,493,546 by Patsiokas.

Regarding claim 34, Patsiokas discloses a sound generation device (Fig. 1, 16; Fig. 2, 11; Fig. 3, 16; i.e. auxiliary audio signal processing and display device) comprising:
an audio source to generate an audio signal (i.e. SDARS) (Fig. 1, 13; Fig. 3, 52; col. 2, lines 59-65; col. 3, lines 7-10; col. 4, lines 27-40);
a frequency modulation (FM) radio frequency (RF) transmitter (Fig. 1, 18; Fig. 3, 18), coupled to the audio source, to transmit an FM carrier signal modulated with the audio signal, the FM carrier signal having a specific carrier frequency within the range of 87.7 to 107.9 megahertz (i.e. 88.5 MHz, 98.7 MHz, or 103.5 MHz) that does not interfere with transmission frequencies in a commercial FM broadcast band of 87.7 to 107.9 megahertz in a geographical region (Fig. 2, 11) in which the sound generation device is currently located (col. 3, lines 14-43 and lines 62-66;

col. 4, lines 4-21; col. 6, lines 42-52);

a channel locator controller (Fig. 3, 58; Fig. 7, 58) to identify an available non-interfering carrier frequency, wherein the channel locator controller includes an RF receiver (Fig. 7: 58, 72), coupled to the RF transmitter (Fig. 3, 18; col. 6, lines 42-52), to receive FM signals having different carrier frequencies (col. 4, lines 46-61; col. 5, lines 34-62; col. 6, lines 21-33); and

a channel locator circuit (Fig. 7: 58, 73), coupled to the RF receiver, to identify two or more bands of FM carrier frequencies below a minimum signal strength (col. 4, lines 48-61; col. 5, lines 38-52; col. 6, lines 21-33);

wherein the channel locator controller (Fig. 7, 58) is configured to identify an available non-interfering carrier frequency from an evaluation of the two or more bands of FM carrier frequencies (col. 4, lines 61-63); and

an out-of-band transmitter (Fig. 3, 60; Fig. 7, 60) to transmit a channel selection signal comprising the available non-interfering carrier frequency (col. 4, lines 61-67; col. 6, lines 7-13).

Regarding claim 35, the sound generation device recited in claim 34, wherein Patsiokas discloses the sound generation device further comprises: a channel selection circuit (Fig. 7: 58, 74), coupled to the RF transmitter (Fig. 3, 18; col. 6, lines 42-52), to select the available carrier frequency on which to transmit the FM carrier signal (col. 4, lines 61-63; col. 5, lines 38-52).

Regarding claim 36, the sound generation device recited in claim 34, wherein Patsiokas discloses the sound generation device comprises one of an MP3 (Motion Picture Experts Group, Audio Layer 3) player, a compact disk player (Fig. 3, 52), a mini-disk player, a micro-disk player, a digital music player, a digital video disk player, a cassette tape player (Fig. 3, 52), a

radio, a cellular phone, a handheld computer, a portable computer, a television, a video player, a personal digital assistant, an electronic musical instrument, an electronic toy, and a wireless microphone (col. 4, lines 32-45).

Regarding claim 47, the sound generation device recited in claim 34, wherein Patsiokas discloses the channel locator controller identifies the available non-interfering carrier frequency by selecting a center frequency of a first band of FM carrier frequencies having at least a predetermined frequency width (i.e. 200 KHz) (col. 5, lines 34-62).

Regarding claim 48, the sound generation device recited in claim 34, wherein Patsiokas discloses the channel locator controller identifies the available non-interfering carrier frequency by selecting a center frequency of a widest identified band (i.e. 200 KHz) (col. 5, lines 34-62).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 41, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Patsiokas in view of U.S. Pat. No. 6,181,921 by Konisi et al, hereinafter Konisi.

Regarding claim 41, Patsiokas discloses a portable electronic device (Fig. 1, 16; Fig. 2, 11; Fig. 3, 16; i.e. auxiliary audio signal processing and display device) comprising: an audio source to generate an audio signal (i.e. SDARS) (Fig. 1, 13; col. 2, lines 59-65; col. 3, lines 7-10; col. 4, lines 27-40); a frequency modulation (FM) radio frequency (RF) transmitter (Fig. 1, 18; Fig. 3, 18), coupled to

the audio source, to transmit an FM carrier signal modulated with the audio signal (col. 4, lines 4-21); and

a channel locator controller (Fig. 3, 58; Fig. 7, 58) to identify an available non-interfering carrier frequency for the FM carrier signal having a specific carrier frequency within the range of 87.7 to 107.9 megahertz (i.e. 88.5 MHz, 98.7 MHz, or 103.5 MHz) that does not interfere with transmission frequencies in a commercial FM broadcast band of 87.7 to 107.9 megahertz in a geographical region (Fig. 2, 11) in which the portable electronic device is currently located (col. 3, lines 14-43 and lines 62-66; col. 4, lines 4-21; col. 6, lines 42-52);

wherein the channel locator controller (Fig. 3, 58; Fig. 7, 58) includes a stored program digital computer (Fig. 7: 73, 74), the computer to store a database of two or more available non-interfering carrier frequencies (col. 4, lines 61-63; col. 5, lines 38-52);

wherein the channel locator controller is configured to identify a selected non-interfering carrier frequency from two or more available non-interfering frequencies stored in the database based on an evaluation of the two or more available non-interfering frequencies (col. 4, lines 61-63); and an out-of-band transmitter (Fig. 3, 60; Fig. 7, 60) to transmit a channel selection signal comprising the selected non-interfering carrier frequency (col. 4, lines 61-67; col. 6, lines 7-13).

Patsiokas discloses identifying a selected non-interfering carrier frequency from available non-interfering frequencies. However, Patsiokas does not disclose a geoposition source.

Konisi discloses a portable electronic device (Figs: 1A, 1B; col. 7, line 66 – col. 9, line 7) comprising:

an audio source (col. 11, line 64 - col. 12, line 40) to generate an audio signal coupled with a geoposition source (col. 8, lines 6-22; Fig. 1A, 112);

a frequency modulation (FM) radio frequency (RF) transmitter (Fig. 1B, 222), coupled to the audio source, to transmit an FM carrier signal modulated with the audio signal (col. 8, line 65 – col. 9, line 2), the FM carrier signal having a specific carrier frequency that does not interfere with transmission frequencies in a commercial FM broadcast band in a geographical region in which the sound generation device is currently located (col. 7, lines 1-31; col. 12, lines 20-40); and a channel locator controller (Fig. 1B, 100) to identify a non-interfering carrier frequency, wherein the channel locator controller includes a stored program digital computer (Fig. 1B, 144), the computer to store a database of non-interfering carrier frequencies arranged by geolocation (col. 10, lines 28-32); and a geolocation source (col. 8, lines 6-22; Fig. 1A, 112) coupled to the stored program digital computer to provide a geolocation to the stored program digital computer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable electronic device of Patsiokas to include a geolocation source as taught by Konisi. One of ordinary skill in the art would have been lead to make such a modification to provide a source that can detect the location of the portable electronic device and provide local broadcasting information to the device according to its location.

Regarding claim 45, the device recited in claim 41, wherein Patsiokas discloses the audio source comprises prerecorded audio source material (col. 3, lines 7-10).

Regarding claim 46, the device recited in claim 41, wherein Patsiokas discloses the audio source comprises a digital music player (col. 3, lines 7-10; col. 4, lines 21-45).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

12. Any response to this action should be mailed to:

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Or call:

(571) 272-2600 (for customer service assistance)

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LISA HASHEM whose telephone number is (571)272-7542. The examiner can normally be reached on M-F 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-2600.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614

/Lisa Hashem/
Examiner, Art Unit 2614
July 19, 2008